

REMARKS

This Response is submitted in reply to the non-final Office Action mailed on August 7, 2007. No fee is due in connection with this Response. The Director is authorized to charge any additional fees which may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 112701-443 on the account statement.

Claims 1-2, 4-15 and 17-23 are pending in this application. Claims 3 and 16 were previously canceled. In the Office Action, Claims 1-2, 4-15 and 17-23 are rejected under 35 U.S.C. §103. For at least the reasons set forth below, Applicants respectfully submit that the rejections are improper and should be withdrawn.

In the Office Action, Claims 1-2, 4-15, and 17-23 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,763,566 to Paoletti ("*Paoletti*") or U.S. Patent No. 3,918,355 to Weber ("*Weber*"), either in view of U.S. Patent No. 4,890,653 to Sartulairi ("*Sartulairi*") or U.S. Patent No. 6,253,665 to Giannelli ("*Giannelli*"). Applicants believe these rejections are improper and respectfully traverse them for at least the reasons set forth below.

Independent Claims 1 and 14 recite, in part, a device comprising a chamber having a volume coupled to a water reservoir, a piston in the chamber that is displaced by a gas under pressure and a valve selectively allowing compressed gas to displace the piston so as to empty the chamber of water and restoring atmospheric pressure in the volume of the chamber for filling of said volume from the reservoir. In contrast, Applicants respectfully submit that *Paoletti*, *Weber*, *Sartulairi*, and *Giannelli* are deficient with respect to the present claims.

Applicants respectfully submit that, even if combinable, all of the claimed elements are not taught or suggested by the cited references. For example, *Paoletti*, *Weber*, *Sartulairi* and *Giannelli* all fail to disclose or suggest a valve selectively allowing compressed gas to displace the piston so as to empty the chamber of water and to restore atmospheric pressure in the volume of the chamber for filling of said volume from the reservoir as required, in part, by Claims 1 and 14.

As set forth in the specification, in an embodiment, the claim elements allow the use of a valve connected to the chamber to be opened and placed in communication with the ambient air. The piston in the chamber is displaced by a spring that relaxes and draws water from a water reservoir into the chamber. Once the chamber is filled with water, the valve is placed in a

position in which there is a link to a compressed-gas reservoir and the chamber. The gas expands against the piston in the chamber and displaces the piston so as to displace the mass of water in the side of the piston. The water passes by non-return valve into a heating system and via an extraction head thereby delivering coffee to a cup. In this manner, control of one valve will operate not only to allow compressed gas to displace the piston so as to empty the chamber of water, but also to restore atmospheric pressure in the volume of the chamber for filling of said volume from the reservoir.

Although *Paoletti*, *Weber*, *Sartulairi* and *Giannelli* may disclose the use of valves, none of the cited references disclose the use of one valve to control displacement of the piston and restoration of atmospheric pressure in the volume of the chamber as is required, in part, by Claims 1 and 14. Thus, these claimed limitations are neither disclosed nor suggested.

Moreover, Applicants respectfully submit that there exists no reason to combine *Paoletti*, *Weber*, *Sartulairi*, and *Giannelli* to obtain the present claims because the mode of operation of the device in each reference is completely different. Each reference must be considered as a whole and those portions teaching against or away from each other and/or the claimed invention must be considered. *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve Inc.*, 796 F.2d 443 (Fed. Cir. 1986). "A prior art reference may be considered to teach away when a person of ordinary skill, upon reading the reference would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the Applicant." *Monarch Knitting Machinery Corp. v. Fukuhara Industrial Trading Co., Ltd.*, 139 F.3d 1009 (Fed. Cir. 1998), quoting, *In re Gurley*, 27 F.3d 551 (Fed. Cir. 1994).

Paoletti is directed toward a manually operated coffee-making machine having a lever-operated actuator having a fixed lever and a movable lever. See, *Paoletti*, column 3, lines 23-31. The levers are attached to a piston that is actuated by manual operation of the levers and is movable inside a pump element. The manual operation of the coffee-machine provides for virtually immediate thermal balance of all the assemblies which make up the coffee-making machine in order to ensure uniform quality of the dispensed product. See, *Id.*

Weber is directed toward an infusion apparatus where liquid is pushed from a first chamber to a second chamber by a weighted piston that specifically designed to be actuated by the force of gravity. See, *Weber*, column 4, lines 53-59. In *Weber*, the piston is in direct contact with the liquid as the force of gravity acts on the weight of the piston forcing the liquid under

substantially constant pressure through the passage into the second chamber. Although the apparatus of *Weber* utilizes a piston to empty the first chamber, the piston is entirely driven by the force of gravity as opposed to being driven by manual operation (*Paoletti*).

In contrast to the manually operated coffee-maker of *Paoletti* and the weighted piston of *Weber*, *Sartulairi* is entirely directed toward a beverage distributor for use in an aircraft having a piston that may be actuated by a compressed gas. The coffee-maker of *Sartulairi* is designed to allow distribution of doses of a liquid. See, *Sartulairi*, column 1, lines 6-9. Although the apparatus of *Sartulairi* utilizes a piston to empty a chamber, the piston is entirely driven by the force of compressed air as opposed to being driven by manual operation (*Paoletti*), or the force of gravity (*Weber*), which teaches away from either combination.

Similarly, *Giannelli* is entirely directed toward a brewing unit for automatic beverage dispensers wherein the piston may be actuated by a compressed gas. The brewing unit of *Giannelli* provides a single-acting hydraulic jack having a piston that may be acted on by compressed gas. The structure of the brewing unit simplifies the mechanisms and renders them more reliable and less costly on an industrial scale. See, *Giannelli*, column 1, lines 50-62. Although the apparatus of *Giannelli* utilizes a piston to empty a chamber, the piston is entirely driven by compressed air as opposed to being driven by manual operation (*Paoletti*), or the force of gravity (*Weber*), which teaches away from either combination.

Moreover, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). For example, *Paoletti* uses manual operation of a lever to empty the first chamber, and *Weber* uses the force of gravity to move a piston to empty the reservoir. In contrast to both *Paoletti* and *Weber*, *Sartulairi* and *Giannelli* use compressed air to move a piston to empty a chamber. In fact, the Patent Office has provided no attempt at how the compressed air of *Sartulairi* or *Giannelli* could be functionally incorporated into the machines of either *Paoletti* or *Weber*. Consequently, the skilled artisan would have no reason to combine the cited references to arrive at the present claims.

For at least the reasons discussed above, the combination of *Paoletti* or *Weber* and *Sartulairi* or *Giannelli* is improper. Furthermore, even if combinable, *Paoletti*, *Weber*, *Sartulairi* and *Giannelli* do not teach, suggest, or even disclose all of the elements of Claims 1 and 14 and

Claims 2, 4-13, 15 and 17-23 that depend from Claims 1 and 14, and thus, fail to render the claimed subject matter obvious.


Accordingly, Applicants respectfully request that the rejection of Claims 1-2, 4-15 and 17-23 under 35 U.S.C. §103 be withdrawn.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly solicit an early allowance of same.

Respectfully submitted,

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